(3) Piping materials that comply with subchapter F of this chapter, and piping thickness of at least schedule 80.

(4) Each fore-and-aft run of piping located as far inboard as practicable.

(5) Rudder stops.

(6) Either—

(i) Two steering pumps in accordance with § 130.130(c)(3) of this part; or

(ii) A single hydraulic sump of the ''cascading overflow'' type with a centerline bulkhead open only at the top, if each half has enough capacity to operate the system.

(7) Control of the main steering gear from the pilothouse, including—

(i) Control from the helm;

(ii) Control of any necessary ancillary device (motor, pump, valve, or the like); and

(iii) Adequate visibility when going astern.

(8) Multiple-screw propulsion with independent control of propulsion from the pilothouse, complying with § 130.120 of this part and being capable of steering the vessel.

(9) Dual hydraulic cylinders arranged so that either cylinder can be readily isolated, permitting the other cylinder to remain in service and move each rudder.

(10) The steering alarms and indicators required by § 111.93–13 of this chapter, located in the pilothouse.

(11) Instantaneous protection against short circuit for electrical power, and control circuits sized and located as required by §§ 111.93–11 (d) and (e) of this chapter.

(12) A rudder-angle indicator, at the steering-control station in the pilothouse, that is independent of the control of the main steering gear.

(13) Means to locally start and stop the steering pumps.

(14) Means to isolate any auxiliary means of steering so as not to impair the reliability and availability of the control required by paragraph (b)(7) of this section.

(15) Manual capability to center and steady the rudder if the vessel loses normal steering power.

(c) For compliance with paragraph (b) of this section, one set of piping among pumps, helm, and cylinders is acceptable.

Subpart B—Miscellaneous Equipment and Systems

§ 130.210 Radiotelegraph and radiotelephone.

Each OSV must comply with 47 CFR part 80 as applicable.

§ 130.220 Design of equipment for cooking and heating.

(a) Doors on each cooking appliance must be provided with heavy-duty hinges and locking-devices to prevent accidental opening in heavy weather.

(b) Each cooking appliance must be installed so as to prevent its movement in heavy weather.

(c) Each grill or similar cooking appliance must have means to collect grease or fat and to prevent its spillage onto wiring or the deck.

(d) On each cooking appliance, grab rails must be installed when determined by the OCMI to be necessary for safety.

(e) On each cooking appliance, sea rails, with suitable barriers to prevent accidental movement of cooking pots, must be installed.

(f) Each heater must be constructed and installed so as to prevent the hanging from it of items such as towels and clothing.

§ 130.230 Protection from refrigerants.

(a) For each refrigeration system that exceeds 20 cubic feet of storage capacity if using ammonia or other hazardous gas, or exceeds 1000 cubic feet of storage capacity if using a fluorocarbon, as a refrigerant, there must be a self-contained breathing apparatus available.

(b) Each self-contained breathing apparatus must be stowed convenient to, but outside of, the space containing the refrigeration equipment.

(c) A complete recharge in the form of a spare charge must be carried for each self-contained breathing apparatus. The spare charge must be stowed with the equipment it is to reactivate.

(d) Each self-contained breathing apparatus must be of a type approved under subpart 160.011 of this chapter.

(e) The self-contained breathing apparatus in the fireman's outfit complies with this section.

§ 130.240 Anchors and chains.

(a) Each OSV must be fitted with anchors and chains meeting the applicable standards set by the ABS for Classed Vessels, including equipment, except as permitted by paragraphs (b) and (c) of this section.

(b) As well as the standards incorporated by paragraph (a) of this section, the following apply:

(1) Except as provided by paragraph (c) of this section, standards of the ABS relating to anchor equipment are mandatory, not precatory.

(2) Each vessel of under 200 feet (61 meters) in length and with an equipment number from the ABS of less than 150 may be equipped with either—

(i) One anchor of the tabular weight and one-half the tabulated length of anchor chain listed in the applicable standard; or

(ii) Two anchors of one-half the tabular weight with the total length of anchor chain listed in the applicable standard, if both anchors are ready for use at any time and if the windlass is capable of heaving in either anchor.

(c) Standards of other classification societies may be used, instead of those established by the ABS, upon approval of the Commandant.

Subpart C—Navigational Equipment

§ 130.310 Radar.

Each OSV of 100 or more gross tons must be fitted with a general marine radar in the pilothouse.

§ 130.320 Electronic position-fixing device.

Each OSV must be equipped with an electronic position-fixing device satisfactory for the area in which the vessel operates.

§ 130.330 Charts and nautical publications.

(a) Except as provided by paragraph (b) or (c) of this section, as appropriate for the intended voyage, each OSV must carry adequate and up-to-date—

(1) Charts of large enough scale to make safe navigation possible;

(2) U.S. Coast Pilot or similar publication;

(3) Coast Guard Light List;

(4) Tide Tables published by the National Ocean Service;

(5) Local Notice or Notices to Mariners; and

(6) Current Tables published by the National Ocean Service, or a river-current publication issued by the U.S. Army Corps of Engineers or by a river authority, or both.

(b) Any OSV may carry, instead of the complete publications listed in paragraph (a) of this section, extracts from them for areas it will transmit.

(c) When operating in foreign waters, an OSV may carry an appropriate foreign equivalent of any item required by paragraph (a) of this section.

§ 130.340 Compass.

Each OSV must be fitted with a compass suitable for the intended service of the vessel. Except aboard a vessel limited to daytime operation, the compass must be illuminated.

Subpart D—Automation of Unattended Machinery Spaces

§ 130.400 Applicability.

This subpart applies to each OSV of 100 or more gross tons where automated systems either replace specific personnel in the control and observation of the propulsion system and machinery spaces or reduce the level of crew associated with the vessel's engine department.

§ 130.410 General.

(a) Arrangements must be such that under any operating condition, including maneuvering, the safety of the OSV is equivalent to that of the same vessel with the machinery spaces fully tended and under direct manual supervision.

(b) Acceptance by the Coast Guard of automated systems to replace specific crew members or to reduce overall requirements for crew members depends upon the—

(1) Capabilities of the automated system;

(2) Combination of crew members, equipment, and systems necessary to ensure the safety of the OSV, personnel, and environment in each operating condition, including maneuvering; and